

U.S. Department of Commerce, Patent and Trademark Office				Atty Docket No.	Serial No.		
				M-8915-1C US US	09/839,991		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Applicants			
(Use several sheets if necessary)				Mohammad H. S. Amin et al.			
				Filing Date	Group		
				April 20, 2001	Unknown		
U.S. Patent Documents							
*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
<i>J. S.</i>	AA 5,917,322	Jun. 29, 1999	Gershenfeld et al.	324	307		
Foreign Patent Documents							
						Translation	
	AB					Yes	No
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AC	Blatter, G. et al., "Design aspects of superconducting-phase quantum bits", <i>The American Physical Society</i> (2001) Vol. 63, Pages 174511-1 to 174511-9.					
	AD	Briegel, H.-J. et al., "Quantum repeaters for communication" (1998), Pages 1-8.					
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	AF	Chrestin, A. et al., "Evidence for a proximity-induced energy gap in Nb/InAs/Nb junctions", <i>The American Physical Society</i> (1997) Vol. 55, Pages 8457-8465.					
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	AH	Feynman, R., "Simulating Physics with Computers", <i>International Journal of Theoretical Physics</i> (1982) Vol. 21, Pages 467-488.					
	AI	Grover, L., "A fast quantum mechanical algorithm for database search", Pages 1-8.					
	AJ	Havel, T. et al., "Principles and demonstrations of quantum information processing by NMR spectroscopy" (1999), Pages 1-42.					
	AK	Jacobs, A. et al., "Proximity Effect, Andreev Reflections, and Charge Transport in Mesoscopic Superconducting-Semiconducting Heterostructures" (1998) eight pages..					
	AL	Jones, J. et al., "Implementation of a quantum search algorithm on a quantum computer", <i>Nature</i> (1998) Vol. 393, Pages 344-346.					
Examiner	<i>J. S.</i>		Date Considered	11/01			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.							

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AA							
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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
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	AE	Knill, E. et al., "Resilient Quantum Computation", <i>Science</i> (1998) Vol. 279, Pages 342-345.					
	AF	Korotkov, A. et al., "Charge sensitivity of radio frequency single-electron transistor", <i>American Institute of Physics</i> (1999) Vol. 74, Pages 4052-4054.					
	AG	Lachenmann, S. et al., "Charge transport in superconductor/semiconductor/normal-conductor step junctions", <i>The American Physical Society</i> (1997) Vol. 56, Pages 108-115.					
	AH	Mooij, J. et al., "Josephson Persistent-Current Qubit", <i>Science</i> (1999) Vol. 285, Pages 1036-1039.					
	AI	Nakamura, Y. et al., "Coherent control of macroscopic quantum states in a single-Cooper-pair box", <i>Nature</i> (1999), Vol. 398, Pages 786-788.					
	AJ	Omelyanchouk, A. et al., "Ballistic Four-Terminal Josephson Junction: Bistable States and Magnetic Flux Transfer" (1999) Pages 1-11 with six pages of drawings.					
	AK	Ouboter, R. et al., "Macroscopic quantum interference effects in superconducting multiterminal microstructures", <i>Academic Press</i> (1999) Vol. 25, Pages 1005-1017.					
<i>JH</i>	AL	Ryazanov, V. et al., "Coupling of two superconductors through a ferromagnet: evidence for a η junction" (2000) Pages 1-6.					
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	AB						Yes
							No
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	AH	Tafuri, F. et al., "Feasibility of biepitaxial $YBa_2Cu_3O_{7-x}$ Josephson junctions for fundamental studies and potential circuit implementation", <i>The American Physical Society</i> (2000) Vol. 62, Pages 431-438.					
	AI	Vandersypen, L. et al., "Experimental Realization of an Order-Finding Algorithm with an NMR Quantum Computer", <i>The American Physical Society</i> (2000) Vol. 25, Pages 5452-5455.					
	AJ	Vleeming, B., "The Four-terminal SQUID", Pages 1-100.					
	AK	Volkov, A. et al., "Phase-coherent effects in multiterminal superconductor/normal metal mesoscopic structures" (2000), Pages 1-6.					
<i>JP</i>	AL	Ye, P. et al., "High Magnetic Field Microwave Conductivity of 2D Electrons in an Array of Antidots" (2001), Pages 1-4.					
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Sheet 1 of 2

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	APPLICANT Mohammad Amin	
	FILING DATE April 20, 2001	GROUP 2811

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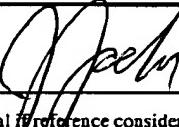
*EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>JL</i>	AA	5,917,322	6/29/99	Gershenfeld et al.	324	307	

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	AF	P. Shor, "Polynomial-Time Algorithms For Prime Factorization And Discrete Logarithms On A Quantum Computer", ArXiv.org: quant-ph/9508027, pp. 1-26 (1995).
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8/4/4

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete If Known			
				Application Number		09/839,991	
				Filing Date		April 20, 2001	
				First Named Inventor		Mohammad Amin	
				Art Unit		2811	
				Examiner Name		Not Yet Assigned	
Sheet	1	of	2	Attorney Docket Number	11090-034-999		
U.S. PATENT DOCUMENTS							
Examiner Initials	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		Number - Kind Code ² (if known)					
	BA	US-6,495,854 B1	12/17/02	D.M. Newns, and C.C. Tsuei			
	BB	US-6,459,097 B1	10/01/02	A. M. Zagorskin			
	BC	US-6,504,172 B2	01/07/03	A. M. Zagorskin et al.			
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		Country Code ⁴ - Number ⁵ - Kind Code ⁶ (if known)					
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	BM	Y. Makhlin, G. Schön, and A. Shnirman, "Quantum-State Engineering with Josephson-Junction Devices," <i>Reviews of Modern Physics</i> , Vol. 73, pp. 357–400 (2001).
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Examiner Signature	<i>Jackson</i>	Date Considered 11/04

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- ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.
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